From: William B. Karesh karesh@ecohealthalliance.org

To: Brian Bird <bhbird@ucdavis.edu>

CC: Tracey Goldstein@ucdavis.edu>;Jonna Mazet <ikmazet@ucdavis.edu>;Jon

Epstein <epstein@ecohealthalliance.org>

Sent: 4/25/2017 10:28:48 AM

Subject: Re: Sierra Leone

I agree. For one, our sampling approach might already be good, second, even if there is not time to implement this week (we can't continue the field investigation too long without budget) we may be able to add some of their suggestions in the future. But, we do need to be careful about not straying too far into protocols that will bias work towards a particular pathogen and are not comparable across all of our countries.

BK

William B. Karesh, D.V.M

Executive Vice President for Health and Policy

EcoHealth Alliance 460 West 34th Street - 17th Floor New York, NY 10001 USA

+1.212.380.4463 (direct) +1.212.380.4465 (fax) www.ecohealthalliance.org

President, OIE Working Group on Wildlife

Co-chair, IUCN Species Survival Commission - Wildlife Health Specialist Group

EPT Partners Liaison, USAID Emerging Pandemic Threats - PREDICT-2 Program

EcoHealth Alliance leads cutting-edge research into the critical connections between human and wildlife health and delicate ecosystems. With this science we develop solutions that promote conservation and prevent pandemics.

On Apr 25, 2017, at 1:23 PM, Brian Bird bhbird@ucdavis.edu wrote:

I think it makes sense to talk to Jeff and Mary about this. Could be they have some insights that might be really helpful? Especially since MPXV seems to pop up a bit more than occasionally and we might be involved in another field expedition?

If others agree, maybe we have a call with them and see what they have to say?

-b

From: "Damon, Inger K. (CDC/OID/NCEZID)" <iad7@cdc.gov>

Date: Tuesday, April 25, 2017 at 10:04 AM

To: "William B. Karesh, D.V.M" < karesh@ecohealthalliance.org, "Reynolds, Mary (CDC/OID /NCEZID)" < nzr6@cdc.gov

Cc: "Doty, Jeffrey B. (CDC/OID/NCEZID)" < uwb7@cdc.gov >, Jon Epstein

<epstein@ecohealthalliance.org>, "McCollum, Andrea (CDC/OID/NCEZID)" <azv4@cdc.gov>,

"Olson, Victoria (CDC/OID/NCEZID)" <vao9@cdc.gov>, Karen Saylors

<ksaylors@metabiota.com</p>
, Brian Bird <bhbird@ucdavis.edu</p>
, "Towner, Jonathan (Jon) (CDC/OID/NCEZID)" <<ir>
inp7@cdc.gov</r>
, Tracey Goldstein <tgoldstein@ucdavis.edu</p>
, Simon Anthony <anthony@ecohealthalliance.org</p>

Subject: RE: Sierra Leone

Great to hear – I think our CDC poxvirus folks had some additional thoughts about sampling strategies that may be more sensitive for poxvirus identification in rodents –

Inger

From: William B. Karesh [mailto:karesh@ecohealthalliance.org]

Sent: Tuesday, April 25, 2017 12:45 PM

To: Reynolds, Mary (CDC/OID/NCEZID) < nzr6@cdc.gov>

Cc: Doty, Jeffrey B. (CDC/OID/NCEZID) <uwb7@cdc.gov>; Jon Epstein <epstein@ecohealthalliance.org>;

Damon, Inger K. (CDC/OID/NCEZID) < iad7@cdc.gov >; McCollum, Andrea (CDC/OID/NCEZID)

<azv4@cdc.gov>; Olson, Victoria (CDC/OID/NCEZID) <vao9@cdc.gov>; Karen Saylors

<ksaylors@metabiota.com>; Brian Bird <bhbird@ucdavis.edu>; Towner, Jonathan (Jon) (CDC/OID/NCEZID)

<<u>iit8@cdc.gov</u>>; Nakazawa, Yoshinori J. (CDC/OID/NCEZID) <<u>inp7@cdc.gov</u>>; Tracey Goldstein

<tgoldstein@ucdavis.edu>; Simon Anthony <anthony@ecohealthalliance.org>

Subject: Re: Sierra Leone

Thanks Mary!

The initial plan is to use the PREDICT OPX family level test protocols that we know picks up monkeypox and related viruses. But I added Tracey Goldstein and Simon Anthony here who have been overseeing the lab testing efforts so they can be in contact with you.

Billy

William B. Karesh, D.V.M

EPT Partners Liaison, USAID Emerging Pandemic Threats - PREDICT-2 Program

Executive Vice President for Health and Policy
EcoHealth Alliance
460 West 34th Street - 17th Floor
New York, NY 10001 USA

+1.212.380.4463 (direct) +1.212.380.4465 (fax) www.ecohealthalliance.org

President, OIE Working Group on Wildlife

Co-chair, IUCN Species Survival Commission - Wildlife Health Specialist Group

EPT Partners Liaison, USAID Emerging Pandemic Threats - PREDICT-2 Program

EcoHealth Alliance leads cutting-edge research into the critical connections between human and wildlife health and delicate ecosystems. With this science we develop solutions that promote conservation and prevent pandemics.

On Apr 25, 2017, at 12:35 PM, Reynolds, Mary (CDC/OID/NCEZID) <nzr6@cdc.gov> wrote:

Hi Billy,

We'd be happy to chat with you all about how to optimize this for OPX specimen collection and subsequent testing. Just say the word.

Regards,

Mary

Sent from my BlackBerry 10 smartphone.

From: William B. Karesh

Sent: Tuesday, April 25, 2017 11:34 AM **To:** Doty, Jeffrey B. (CDC/OID/NCEZID)

Cc: Jon Epstein; Damon, Inger K. (CDC/OID/NCEZID); Reynolds, Mary (CDC/OID/NCEZID); McCollum, Andrea (CDC/OID Karen Saylors; Brian Bird; Towner, Jonathan (Jon) (CDC/OID/NCEZID); Nakazawa, Yoshinori J. (CDC/OID/NCEZID)

Subject: Re: Sierra Leone

Thanks Jeff.

BK

William B. Karesh, D.V.M

Executive Vice President for Health and Policy

EcoHealth Alliance 460 West 34th Street - 17th Floor New York, NY 10001 USA

+1.212.380.4463 (direct) +1.212.380.4465 (fax) www.ecohealthalliance.org

President, OIE Working Group on Wildlife

Co-chair, IUCN Species Survival Commission - Wildlife Health Specialist Group

EPT Partners Liaison, USAID Emerging Pandemic Threats - PREDICT-2 Program

EcoHealth Alliance leads cutting-edge research into the critical connections between human and wildlife health and delicate ecosystems. With this science we develop solutions that promote conservation and prevent pandemics.

On Apr 24, 2017, at 6:32 PM, Doty, Jeffrey B. (CDC/OID/NCEZID) <uwb7@cdc.gov> wrote:

Hi Billy,

Thanks for sharing this! We have had good success with submandibular vein bleeds for small rodents and cranial vena cava for medium sized rodents. We also use Nobuto dried blood filter strips to obtain blood samples for ELISA when only small quantities are available.

Thanks again,

Jeff

On Apr 24, 2017, at 6:20 PM, William B. Karesh karesh@ecohealthalliance.org wrote:

Hi Jeff,

We focus sampling on non-lethal methods in general, but there are occasions when access to sampling animals that are dead do occur such as in markets, working with authorities that are doing depredation work or animal control, etc. I'm attaching a sample of one of our sampling protocols (for rodents) here so that you can see the typical sampling strategy. These are living documents and for example, this one (January version) has not been updated to reflect that as of a week or two ago, the field teams are no longer going to use retro-bulbar blood sampling based on feedback from the partners.

BK

On Apr 24, 2017, at 6:03 PM, Doty, Jeffrey B. (CDC/OID/NCEZID) < <u>uwb7@cdc.gov</u>> wrote:

Thanks Billy,

Are your teams conducting any terminal sampling or relying on blood and swab samples? We could help with serology for serum samples collected through this effort.

I am also adding in Yosh Nakazawa, the pox and rabies ecology and evolution team lead.

Best, Jeff

On Apr 24, 2017, at 5:26 PM, William B. Karesh < karesh@ecohealthalliance.org > wrote:

Greetings everyone.

The PREDICT team in Sierra Leone was asked by the Ministry of Health there to work with CDC and others on the outbreak investigation and our last message from them this AM is that they have sent along some personnel and equipment for animal trapping. They have begun trapping and sampling primarily rodents. They have been coordinating with Sara Hersey from the CDC office in SL.

I'm copying Karen Saylors from Metabiota here as they are the PREDICT implementing partner in SL, and Brian Bird from UC Davis because he helps track our "outbreak" investigations. As you might know, the primary focus of PREDICT is not outbreak response, but when asked by local government authorities and approved by USAID, we try to help with investigations.

Looping in Jon Towner here also.

Please let us know if we can help or provide more information.

Billy

William B. Karesh, D.V.M

EPT Partners Liaison, USAID Emerging Pandemic Threats - PREDICT-2 Program

Executive Vice President for Health and Policy
EcoHealth Alliance
460 West 34th Street - 17th Floor
New York, NY 10001 USA

- +1.212.380.4463 (direct)
- +1.212.380.4465 (fax)

www.ecohealthalliance.org

President, OIE Working Group on Wildlife

Co-chair, IUCN Species Survival Commission - Wildlife Health Specialist Group

EcoHealth Alliance leads cutting-edge research into the critical connections between human and wildlife health and delicate ecosystems. With this science we develop solutions that promote conservation and prevent pandemics.

On Apr 24, 2017, at 4:55 PM, Jon Epstein <epstein@ecohealthalliance.org> wrote:

Thanks Mary and Inger,

I'm looping in Billy Karesh, PREDICT's Partner Liaison and who's current on PREDICT's engagement with the monkeypox investigation in Sierra Leone.

Cheers, Jon

On Mon, Apr 24, 2017 at 2:38 PM, Reynolds, Mary (CDC/OID/NCEZID) < <u>nzr6@cdc.gov</u>> wrote: Hi Jon,

Jeff Doty--copied here-- would no doubt have helpful insights for the team about optimal specimens, specimen analysis, decon for poxviruses etc.

Would be happy to set up a call if that would be useful.

Regards,

Mary

Sent from my BlackBerry 10 smartphone.

From: Damon, Inger K. (CDC/OID/NCEZID) Sent: Monday, April 24, 2017 2:17 PM

To: Reynolds, Mary (CDC/OID/NCEZID); McCollum, Andrea (CDC/OID/NCEZID); Jon Epstein

Cc: Olson, Victoria (CDC/OID/NCEZID)

Subject: Re: Sierra Leone

Adding Mary and Andrea. They will know specifics.

Thanks for the quick reply!

Inger

From: Jon Epstein < epstein@ecohealthalliance.org >

Date: April 24, 2017 at 2:14:05 PM EDT

To: Damon, Inger K. (CDC/OID/NCEZID) < iad7@cdc.gov>

Subject: Re: Sierra Leone

Inger,

Thank you for reaching out. I'll convey that to PREDICT senior management and S.L. team.

Are there others from your team, in addition to you, that our Sierra Leone PREDICT leads should contact?

Cheers, Jon

On Mon, Apr 24, 2017 at 1:48 PM, Damon, Inger K. (CDC/OID/NCEZID) <iad7@cdc.gov> wrote:

Jon

I hear your folks (USAID predict) have engaged in the disease ecology work associated with the recent confirmed case of monkeypox in Sierra Leone. Our folks would be happy to consult -

Inger

--

Jonathan H. Epstein DVM, MPH, PhD Vice President for Science and Outreach EcoHealth Alliance 460 West 34th Street – 17th floor New York, NY 10001

1.212.380.4467 (direct) mobile)

web: ecohealthalliance.org

Twitter:

EcoHealth Alliance leads cutting-edge research into the critical connections between human and wildlife health and delicate ecosystems. With this science we develop solutions that promote conservation and prevent pandemics.

--

Jonathan H. Epstein DVM, MPH, PhD Vice President for Science and Outreach EcoHealth Alliance 460 West 34th Street – 17th floor New York, NY 10001

1.212.380.4467 (direct) (mobile)

web: ecohealthalliance.org

Twitter:

EcoHealth Alliance leads cutting-edge research into the critical connections between human and wildlife health and delicate ecosystems. With this science we develop solutions that promote conservation and prevent pandemics.